

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 12/30/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/961,273	09/25/2001	Naoya Hashimoto	Q65705	8063	
7590 12/30/2003 SUGHRUE, MION, ZINN, MACPEAK & SEAS			EXAMINER ROJAS, BERNARD		
,			2832		

Please find below and/or attached an Office communication concerning this application or proceeding.

				,
	Application	ı No.	Applicant(s)	
Office Action Commence	09/961,273	3	HASHIMOTO ET AL.	W
Office Action Summary	Examin r		Art Unit	
	Bernard Ro	<u> </u>	2832	
The MAILING DATE of this communication Period for Reply	on appears on the	cover sheet with the	correspondenc addres	s
A SHORTENED STATUTORY PERIOD FOR F THE MAILING DATE OF THIS COMMUNICAT  - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communicat  - If the period for reply specified above is less than thirty (30) days  - If NO period for reply is specified above, the maximum statutory  - Failure to reply within the set or extended period for reply will, by  - Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).  Status	ION. CFR 1.136(a). In no even iton. s, a reply within the statute period will apply and will y statute, cause the applic	t, however, may a reply be ory minimum of thirty (30) d expire SIX (6) MONTHS fro ation to become ABANDOI	timely filed  ays will be considered timely.  om the mailing date of this commur  NED (35 U.S.C. § 133).	nication.
1) Responsive to communication(s) filed on	·			
2a)⊠ This action is <b>FINAL</b> . 2b)□	This action is nor	n-final.		
3) Since this application is in condition for a closed in accordance with the practice ur				rits is
Disposition of Claims				
4)⊠ Claim(s) <u>1 and 7-17</u> is/are pending in the	application.			
4a) Of the above claim(s) is/are wi	thdrawn from con	sideration.		
5) Claim(s) is/are allowed.				
6)⊠ Claim(s) <u>a, 7-11 and 14-17</u> is/are rejected	d.			
7)⊠ Claim(s) <u>12 and 13</u> is/are objected to.				
8) Claim(s) are subject to restriction	and/or election re	quirement.		
Application Papers				
9) The specification is objected to by the Ex	aminer.			
10)☐ The drawing(s) filed on is/are: a)☐	] accepted or b)	objected to by the	e Examiner.	
Applicant may not request that any objection	Ŧ · ·			
Replacement drawing sheet(s) including the	•	=		
11)☐ The oath or declaration is objected to by t	the Examiner. Not	e the attached Office	ce Action or form PTO-1	52.
Priority under 35 U.S.C. §§ 119 and 120				
12) Acknowledgment is made of a claim for f a) All b) Some * c) None of:  1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International E * See the attached detailed Office action for 13) Acknowledgment is made of a claim for do since a specific reference was included in t 37 CFR 1.78. a) The translation of the foreign language	uments have been uments have been e priority documer Bureau (PCT Rule a list of the certification priority under the first sentence of	received. received in Applicants have been received 17.2(a)). ed copies not received as 5 U.S.C. § 119 of the specification	ation No ved in this National Stag ved. 9(e) (to a provisional app or in an Application Data	olication)
14) ☐ Acknowledgment is made of a claim for do	mestic priority un	der 35 U.S.C. §§ 12	20 and/or 121 since a sp	
reference was included in the first sentence	e of the specificati	on or in an Applica	tion Data Sheet. 37 CFR	1.78.
Attachment(s)				
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-9-3)     Information Disclosure Statement(s) (PTO-1449) Paper I	48)		ry (PTO-413) Paper No(s) I Patent Application (PTO-152	

Application/Control Number: 09/961,273

Art Unit: 2832

### **DETAILED ACTION**

### Response to Arguments

Applicant's arguments filed 10/14/2003 have been fully considered but they are not persuasive.

Claim 1, In response to applicant's argument that the Examiner has failed to establish "wherein said cover member protects said coil from being directly subjected to molding pressure when said cover is formed by injection molding, by covering said coil", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The epoxy adhesive [4] covers the super conducting wire thereby protecting it from being *directly* subjected to molding pressure. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Applicant has not required the specific limitation of injection molding the cover. The claim merely states "wherein said cover member protects said coil from being directly subjected to molding pressure when said cover is formed by injection molding, by covering said coil", in the example provided by Shibuta, the cover is not injection molded, but still reads on the claim.

Claim 7, Ghorashi states the "products prepared by melt coating a resin on magnet copper wire have often had deficiencies such as water crazing, marginal

polymer flexibility and poor stability at high temperatures" [col. 1 lines 8-13] in the background section of the disclosure. In the description of the invention, Ghorashi states his process yields a coated copper wire having as adherent coating which is resistant to water crazing and is stable at high temperatures [col. 1 lines 59-65].

Ghorashi teaches a conductor wire coated with an insulative material having a thickness for 1 to 10 mils [col. 2 lines 42-46] which is magnitudes greater than the average size of a flash on a bobbin [0.01mm].

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Shibuta et al. [US Patent #5,512,867].

An electromagnetic device body including a coil formed with a conductor [2] wound around the bobbin [1] and a cover member enclosing the coil [4]. A cover for covering the electromagnetic device body [3]. The cover member protecting the coil from directly subjected to molding pressure when the cover is injection molded.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7-11 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibuta et al. [US Patent #5,512,867] in view of Ghorashi et al. [US Patent #5202187].

Claims 7,14 and 15, Shibuta et al. discloses an electromagnetic device with a bobbin [1], a conductor [2] wound around the bobbin. The conductor has a outer coating.

Shibuta et al. does not disclose the thickness of the outer coating.

Ghorashi et al. discloses a conductor wire coated with an insulative material.

The insulation disclosed is from 1 to 10 mils, at least 4 times larger than the average flash produced on a bobbin as disclosed by applicant.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the two teachings to provide a robust insulation that is stable to high temperatures and is resistant to water crazing, cracking and loss of coating [col. 1 lines 59-65].

Claim 8, Shibuta et al. discloses an electromagnetic device body including a coil formed with a conductor [2] wound around the bobbin [1] and a cover member enclosing the coil [4]. A cover for covering the electromagnetic device body [3].

Shibuta et al. does not disclose the thickness of the outer coating.

Ghorashi et al. discloses a conductor wire coated with an insulative material. The insulation disclosed is from 1 to 10 mils, at least 4 times larger than the average flash produced on a bobbin as disclosed by applicant.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the two teachings to provide a robust insulation that is stable to high temperatures and is resistant to water crazing, cracking and loss of coating [col. 1 lines 59-65].

Claims 9-11 and 16, an electromagnet of this design is useful in many devices, the specific environment in which the electromagnet is used is a design choice based on the users requirements.

Claim 17, the cover member is cylindrical [figure 1].

#### Allowable Subject Matter

Claims 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Rojas whose telephone number is (703) 305-3873. The examiner can normally be reached on M-F (7-4:30), every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (703) 308-7619. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

LINCOIA'I DONOVAN PRIMARY EXAMINER CACUP 2100

Br